

Amendments to the Specification

Please rewrite paragraph [0050] to read as follows:

[0050] These and other objects, features and advantages of the present invention will be more apparent from the following detailed description thereof made in conjunction with the accompanying drawings, in which like reference numerals designate like elements, and in which:

FIG. 1 is a schematic diagram of semiconductor device manufacturing equipment according to the present invention;

FIG. 2 is a perspective view of part of a gate of the semiconductor device manufacturing equipment as taken in the direction of line A-A in FIG. 1; and

FIG. 3 is a similar perspective view of the gate but sealed by the gate valve.

Please rewrite paragraph [0055] to read as follows:

[0055] The semiconductor device manufacturing equipment according to ~~the embodiment~~ of the present invention will now be described with reference to the accompanying drawings.

Please rewrite paragraph [0085] to read as follows:

[0085] Referring now to FIGS. 1 - 3, each process chamber 300 and the transfer chamber 200 have a pair of mutually opposing gate walls by which the chambers 200, 300 are connected. Likewise, the load-lock chamber 100 and the transfer chamber 200

have a pair of mutually opposing gate walls 10 by which the chambers 100, 200 are connected. Each pair of mutually opposing gate walls 10 has a first doorway 410 and a second doorway 420 extending therethrough, respectively. The gates 500 define respective passageways interconnecting the chambers 100, 200 and 300 at their mutually opposing gate walls 10 so that a wafer may be transferred among the chambers 100, 200 and 300 via the doorways 410 and 420. A gate valve 400 is operable to selectively seal the gate 500 and hence, to provide a seal between the chambers 100, 200 and 300 interconnected by the gate 500, whereby the desired pressures can be maintained in the chambers 100, 200 and 300. The gate 500 and the gate valve 400 located between the transfer chamber 200 and the process chamber 300 will now be described in more detail with reference to FIGS. 2 and 3.

Please rewrite paragraph [0090] to read as follows:

[0080] The transfer chamber 200 is located between the load-lock chamber 100 and the plurality of the process chamber 300. The transfer chamber 200 includes a robot 250 for transferring the wafers between the chambers 100, 200 and 300 according to the sequence of the particular manufacturing process carried out by the equipment 700. For instance, the robot 250 rapidly loads and unloads the wafers from the load-lock chamber 100 into each of the process chamber 300 and returns the wafers once processed from a process chamber 300 into the load-lock chamber 100.

Please rewrite paragraph [0090] to read as follows:

[0090] More specifically, the ~~The gate 500 forms a~~ first doorway 410 and a second doorway 420 each have ~~having~~ a size capable of allowing the robot 250 to pass therethrough and thereby load the wafers into the process chamber 300 from the transfer chamber 200. The gate valve 400 hermetically seals the gate 500 by forming pressure seals around both doorways 410 and 420, i.e., at both sides of the gate 500. The pressure seals are created by, for example, O-rings of the doors 440, 450 that extend around the doorways 410, 420 when the doors 440, 450 are closed over the doorways 410, 420. The gate valve 400 is thus capable of maintaining the pressure within each of the adjoining chambers 200, 300.

Please rewrite paragraph [0095] to read as follows:

[0095] To this end, the gate valve 400 comprises a first door 440 for directly closing the first doorway 410 to seal it, a second door 450 for directly closing the second doorway 420 to seal it, ~~and a drive~~ driving unit 460 comprising a pneumatic cylinder operable to move the first door 440 and the second door 450 over the first doorway 410 and the second doorway 420, respectively, and a plurality of connection bars 430 connecting the first and second doors 440, 450 with the driving unit 460. More specifically, referring to FIGS. 2 and 3, the driving unit 460 raises the first door 440 and the second door 450 via the connection bars 430 to cover the first doorway 410 and the second doorway 420. During this time, the doors 440 and 450 are moved at an

angle relative to the vertical (direction in which the driving unit 460 translates). On the other hand, the driving unit 460 lowers the first door 440 and the second door 450 via the connection bars 430 to open the first doorway 410 and the second doorway 420. During this time, the doors 440 and 450 are also moved at an angle relative to the vertical (direction in which the driving unit 460 translates) until the doors 440, 450 are spaced from the gate walls 10.